0016

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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INSPECTION REPORT

Partial:___ Complete: XXX Exploration: ___
Inspection Date & Time: [redacted] 2:00 pm
Date of Last Inspection: 11/22/2000

Mine Name: Savage Coal Terminal County: Carbon Permit Number: C[redacted]
Permittee and/or Operator's Name: Savage Industries, Inc.
Business Address: 5250 South 300 West, Suite 200, SLC, UT 84107 / PO Box 587, Wellington, Utah 84542
Type of Mining Activity: Underground _____ Surface XXX Prep. Plant _____ Other _____
Company Official(s): Dan Guy, Boyd Rhodes
State Official(s): Gregg Galecki, Joe Helfrich Federal Official(s): None
Weather Conditions: 50
Existing Acreage: Permitted 160 Disturbed 122 Regraded _____ Seeded _____
Status: Active XXX

REVIEW OF PERMIT, PERFORMANCE STANDARDS & PERMIT CONDITION REQUIREMENTS

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
   a. For complete inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check N/A.
   b. For partial inspections check only the elements evaluated.
2. Document any noncompliance situation by referencing the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Division Orders, and amendments.

	EVALUATED	N/A	COMMENTS	NOV/ENF
1. PERMITS, CHANGE, TRANSFER, RENEWAL, SALE	[X]	[ ]	[X]	[ ]
2. SIGNS AND MARKERS	[X]	[ ]	[X]	[ ]
3. TOPSOIL	[X]	[ ]	[X]	[ ]
4. HYDROLOGIC BALANCE:				
a. DIVERSIONS	[X]	[ ]	[X]	[ ]
b. SEDIMENT PONDS AND IMPOUNDMENTS	[X]	[ ]	[X]	[ ]
c. OTHER SEDIMENT CONTROL MEASURES	[X]	[ ]	[ ]	[ ]
d. WATER MONITORING	[X]	[ ]	[X]	[ ]
e. EFFLUENT LIMITATIONS	[X]	[ ]	[X]	[ ]
5. EXPLOSIVES	[ ]	[X]	[ ]	[ ]
6. DISPOSAL OF EXCESS SPOIL/FILLS/BENCHES	[ ]	[X]	[ ]	[ ]
7. COAL MINE WASTE/REFUSE PILES/IMPOUNDMENTS	[X]	[ ]	[X]	[ ]
8. NONCOAL WASTE	[X]	[ ]	[ ]	[ ]
9. PROTECTION OF FISH, WILDLIFE AND RELATED ENVIRONMENTAL ISSUES	[X]	[ ]	[ ]	[ ]
10. SLIDES AND OTHER DAMAGE	[X]	[ ]	[ ]	[ ]
11. CONTEMPORANEOUS RECLAMATION	[ ]	[X]	[ ]	[ ]
12. BACKFILLING AND GRADING	[ ]	[X]	[ ]	[ ]
13. REVEGETATION	[X]	[ ]	[ ]	[ ]
14. SUBSIDENCE CONTROL	[ ]	[X]	[ ]	[ ]
15. CESSATION OF OPERATIONS	[ ]	[X]	[ ]	[ ]
16. ROADS:				
a. CONSTRUCTION/MAINTENANCE/SURFACING	[X]	[ ]	[X]	[ ]
b. DRAINAGE CONTROLS	[X]	[ ]	[ ]	[ ]
17. OTHER TRANSPORTATION FACILITIES	[X]	[ ]	[ ]	[ ]
18. SUPPORT FACILITIES/UTILITY INSTALLATIONS	[X]	[ ]	[ ]	[ ]
19. AVS CHECK (4th Quarter- April, May, June)	[X]	[ ]	[ ]	[ ]
20. AIR QUALITY PERMIT	[X]	[ ]	[ ]	[ ]
21. BONDING & INSURANCE	[X]	[ ]	[ ]	[ ]

(COMMENTS ARE NUMBERED TO CORRESPOND WITH TOPICS LISTED ABOVE)

1. PERMITS, CHANGE, TRANSFER, RENEWAL, SALE

The permit was renewed August 7, 1999. The current information on file indicates that the TA and CHIA were last updated August 7, 1989. There are no changes to the operation and reclamation plan currently on file with the division.

2. SIGNS AND MARKERS

Permit entry signs were visible at all points of entry to the permit area. The pump house and associated line to the spur were inaccessible during this complete inspection. As noted in previous inspections there has been some difficulty in keeping a few of the perimeter markers in place. Suggestions to add five markers and use an existing fence line to delineate the 20' pipeline corridor were discussed and additional markers in protective locations were added.

3. TOPSOIL

The drainage control berms at the base of each topsoil pile were in good repair and functioning as designed.

4A. HYDROLOGIC BALANCE: DIVERSIONS

The two lower gabion structures located in Diversion Ditch "1a" did not appear to be providing any velocity reduction from the down gradient of the diversion. The two upper gabions had reduced the down gradient to nearly level with the key way. The consensus was to add rock base to the two lower gabions and visually monitor the upper two.

4B. HYDROLOGIC BALANCE: SEDIMENT PONDS AND IMPOUNDMENTS

Ponds 1, 2, 3, 4, 5, and 6 contained runoff from storms and/or water intercepting the French drain. Third quarter pond inspections were conducted on September 18, 2000 for ponds 1, 2, 3, 4, 5, and 6. Ponds 1, 5, and 6 indicated some minor erosion to be addressed during favorable weather conditions of the 1st quarter of 2001.

4D. HYDROLOGIC BALANCE: WATER MONITORING

CV-14W, CV-15W, and CV-1W are monitored biannually typically June and December. DMR's for site CVW-1were reported dry and available for inspection for the months of July, August, September, and October 2000. The following issues were discussed with Dan during the records check:

- •Field Calibration.
- •Holding Times.
- •Conductivity, lab/field identical.
- •Quality control on data entry of field parameters, hard copy versus data base.

At the close out summary, Dan and Boyd agreed to address these issues prior to the next inspection. Further discussion is provided in the following paragraphs.

During the inspection. the purpose and scope of the joint Inspector/Hydrologist inspection was explained. A discussion focused on submission of water monitoring data to the Division. As a precursor to the meeting, a

review of the 4th quarter 1999 through 2nd quarter 2000 water monitoring data submitted to the Division was conducted. The review evaluated the sampling sites submitted, the parameters submitted, and any irregularities found in the data. A review of the Hydrology section of the MRP was also conducted. The site is very basic because there are no monitoring wells, only four surface monitoring points, only one of which ever flows. The site that shows flow, CV-1-W, is a french drain that exists on the northwest and north boundaries of the property; terminating in an approximate 12-ft diameter sump structure located within the pump house on the northeast corner of the property. With the exception of the UPDES discharge point, surface water sampling is conducted on a semi-annual basis.

The deficiencies found in the data that were discussed included missing parameters in both the January 2000 and June 2000 sampling events. Missing parameters in the Data base were attributed to data entry errors because an inspection of the lab sheets indicated the data exists. A source of concern was brought to the attention of the operator that the June 2000 samples were received by the lab eight days after the samples were collected, which exceeded the holding time on some of the required parameters. No Chain-of-custody, or shipping receipt was available to determine who was responsible for the delay. It was discussed that a 'paper trail' would be good documentation to support an effort of getting the samples to the lab on time.

Another source of concern was the elevated Sulfate, Conductivity, and Total Dissolved Solids (TDS) observed in the January 2000 sample. Mr. Dan Guy theorized the lower values exhibited in the summer sample is attributed to dilution of the groundwater from infiltration of canal water located up-gradient of the property. A review of the data collected since 1979 loosely supports the theory. A linear regression of the Field Conductivity and TDS versus time indicated the conductivity has remained constant while the TDS has increased from approximately 8,000 to 13,000 mg/l. (See attachments)

4E. HYDROLOGIC BALANCE: EFFLUENT LIMITATIONS

UPDES Permit #UTG040005 discharge point #001A was reported as no discharge for July, August, September and October of the third and fourth quarters of 2000.

7. COAL MINE WASTE/REFUSE PILES/IMPOUNDMENTS

The MSHA has assigned a new number to the refuse pile that is being transported to the Sunnyside Co-gen facility, # 1211-UT-09-1444-01.

16A. ROADS: CONSTRUCTION/MAINTENANCE/SURFACING

The roads and associated ditches were in good repair.

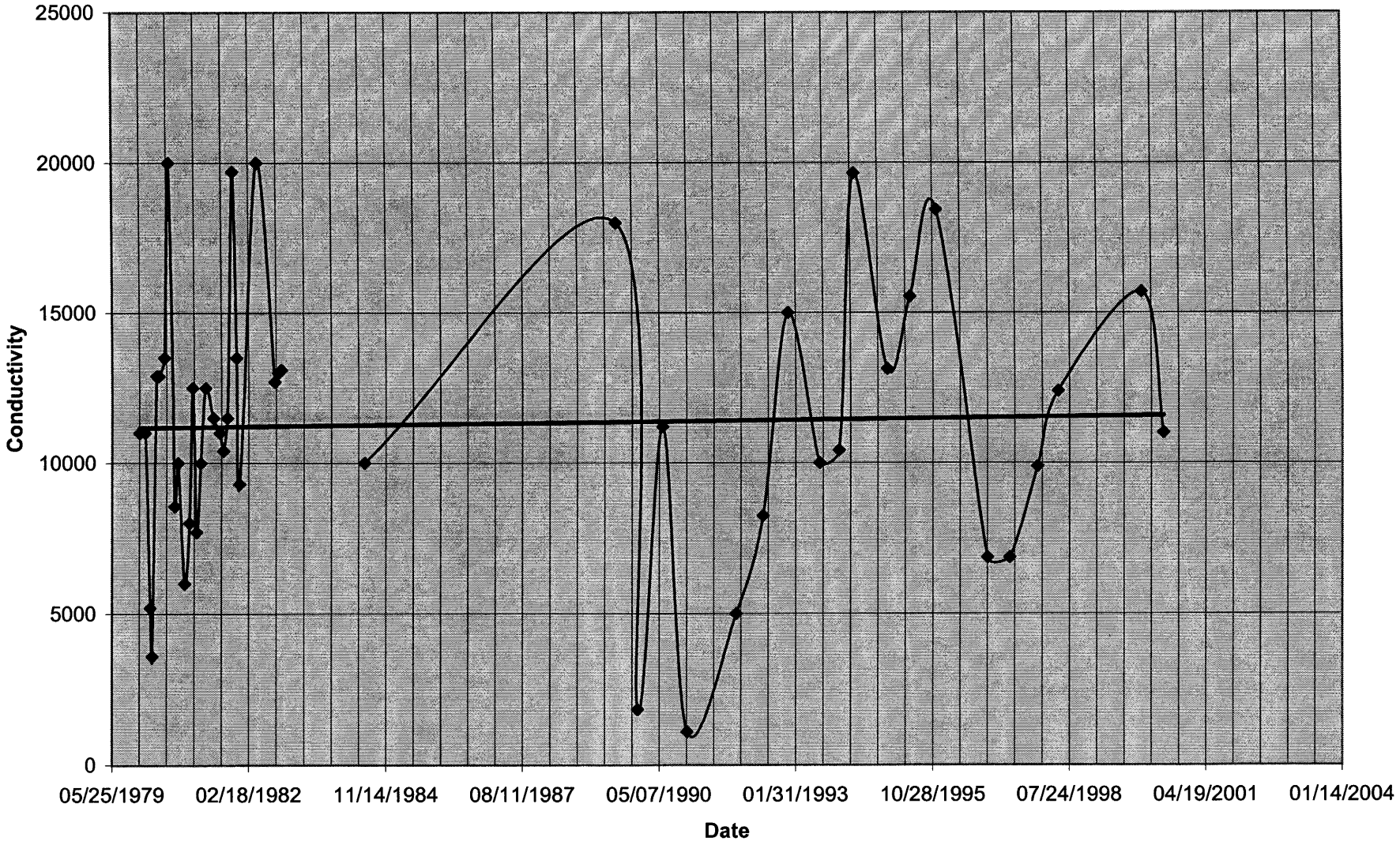
Inspector's Signature: Joseph C. Helfrich #1 Date: December 20, 2000

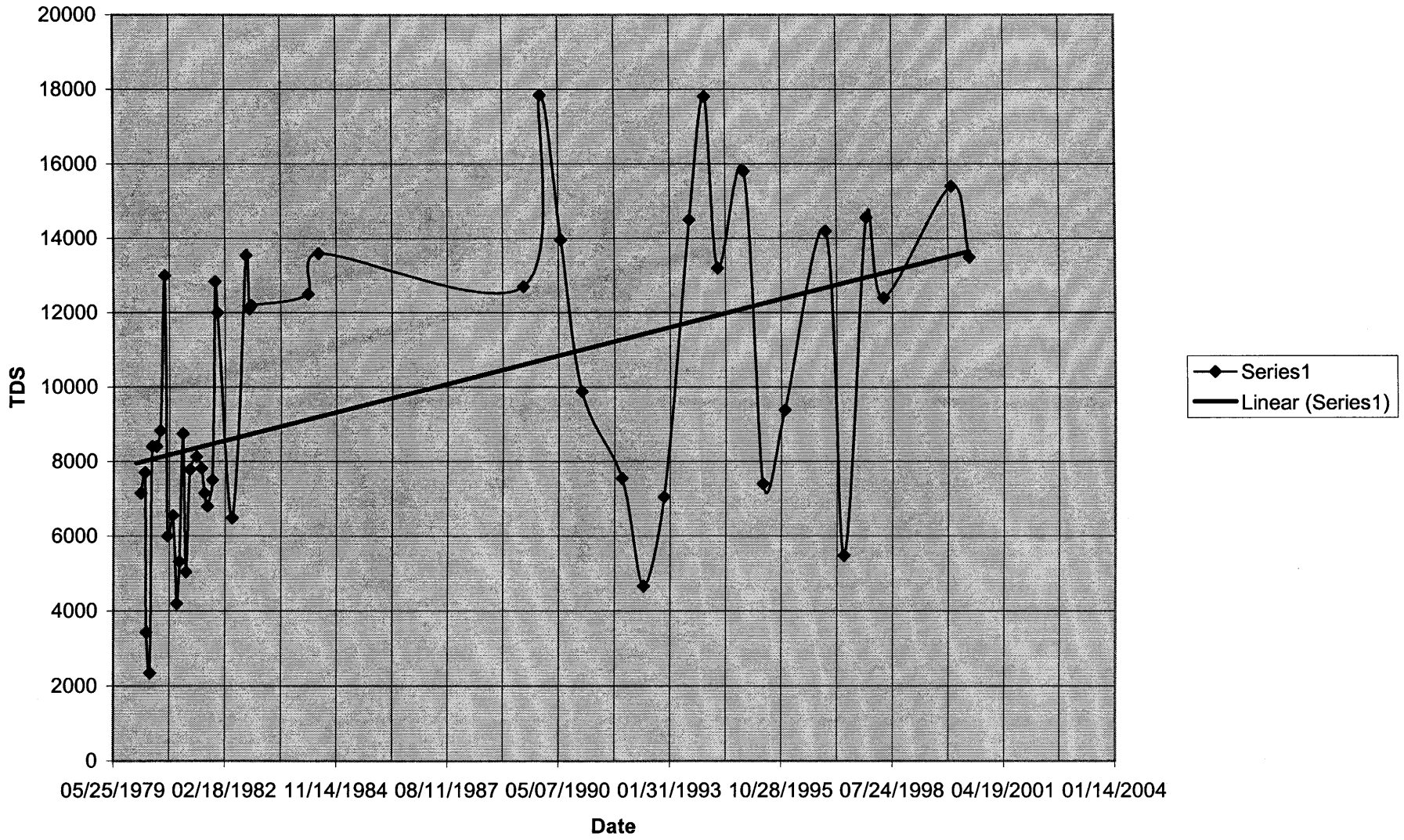
Joseph C. Helfrich #1

Note: This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas & Mining.

sd
cc: James Fulton, OSM
James Jensen, Savage, SLC
Boyd Rhodes, Savage, Price
Price Field office
O:\007022.SAV\Compliance\2000\C_1212.wpd

Savage Coal Terminal




Savage Coal Terminal
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
TDS
05/25/1979
02/18/1982
11/14/1984
08/11/1987
05/07/1990
01/31/1993
10/28/1995
07/24/1998
04/19/2001
01/14/2004
Date
Series1
Linear (Series1)